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November 3, 2003

CERTIFICATE OF MAILING  
37 C.F.R 1.8

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November 3, 2003

Date

Michael R. Krawzenek

**MS DD**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

RE: *U.S. Patent Application No. 10/664,423 entitled "LOCI FOR IDIOPATHIC GENERALIZED EPILEPSY, MUTATIONS THEREOF AND METHOD USING SAME TO ASSESS, DIAGNOSE, PROGNOSIS OR TREAT EPILEPSY" – Guy A. Rouleau et al.  
Our reference: GOUD:023USD2  
Client reference: 760/13180.18USD2*

Sir:

Enclosed for filing in the above-referenced patent application is an Information Disclosure Statement and Form PTO-1449.

No fees are believed to be due in connection with the filing of this Information Disclosure Statement, however, should any fees under 37 C.F.R. §§ 1.16 to 1.21 be deemed necessary for any reason relating to the enclosed materials, the Commissioner is authorized to deduct the appropriate fees from Fulbright & Jaworski Deposit Account No.: 50-1212/GOUD:023USD2.

Please date stamp and return the enclosed postcard evidencing receipt of these materials.

Respectfully submitted,

Michael R. Krawzenek  
Reg. No. 51,898

MRK/cas  
Encl.: As noted

**PATENT**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:  
Guy A. Rouleau et al.

Serial No.: 10/664,423

Filed: September 17, 2003

For: LOCI FOR IDIOPATHIC GENERALIZED  
EPILEPSY, MUTATIONS THEREOF  
AND METHOD USING SAME TO  
ASSESS, DIAGNOSE, PROGNOSIS OR  
TREAT EPILEPSY

Group Art Unit: Unknown

Examiner: Unknown

Atty. Dkt. No.: GOUD:023USD2

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November 3, 2003 _____ Date	<i>Michael R. Krawzsenek</i> Michael R. Krawzsenek

**INFORMATION DISCLOSURE STATEMENT**

**MS DD**  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Sir:

In compliance with the duty of disclosure under 37 C.F.R. § 1.56, it is respectfully requested that this Information Disclosure Statement be entered and the documents listed on attached Form PTO-1449 be considered by the Examiner and made of record.

In accordance with 37 C.F.R. §§ 1.97(g), (h), this Information Disclosure Statement is not to be construed as a representation that a search has been made, and is not to be construed to be

an admission that the information cited is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

The present Information Disclosure Statement is being filed prior to the receipt of a first Official Action reflecting an examination on the merits, and hence is believed to be timely filed in accordance with 37 C.F.R. § 1.97(b). No fees are believed to be due in connection with the filing of this Information Disclosure Statement, however, should any fees under 37 C.F.R. §§ 1.16 to 1.21 be deemed necessary for any reason relating to these materials, the Commissioner is authorized to deduct the appropriate fees from Fulbright & Jaworski Deposit Account No.: 50-1212/GOUD:023USD2.

This application is a divisional application of Serial No. 09/718,355, filed November 24, 2000 and is relied upon for an earlier filing date under 35 U.S.C. § 120. In accordance with Rule 37 C.F.R. § 1.98(d) copies of the listed documents are not enclosed as they have been previously cited by or submitted to the Patent and Trademark Office in prior application Serial No. 09/718,355.

Applicants respectfully request that the listed documents be made of record in the present case.

Respectfully submitted,



Michael R. Krawzenek  
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Attorney for Applicants

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Date: November 3, 2003



Form PTO-1449 (modified)

## List of Patents and Publications for Applicant's

## INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

Atty. Docket No.  
GOUD:023USD2Serial N .  
10/664,423Applicant  
Guy A. Rouleau *et al.*Filing Date:  
September 17, 2003Group:  
Unknown

## U.S. Patent Documents

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## Foreign Patent Documents

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## Other Art

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## U.S. Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date of App.
	A1	5,223,409	6-29-93	Ladner et al.	435	69.7	3-1-91

## Foreign Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Country	Class	Sub Class	Translation Yes/No
	B1	WO 99/21875	5-6-99	PCT			

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	C1	Andermann, E., Genetic Basis of the Epilepsies, Raven Press, New York, pp. 355-374, 1982.
	C2	Anderson et al., "Use of cyclosporin A in establishing Epstein-Barr virus-transformed human lymphoblastoid cell lines," <i>In Vitro</i> , 20:856-858, 1984.
	C3	Annegers et al., Genetic Basis of the Epilepsies, Raven Press, New York, pp.151-159, 1982.
	C4	Baker et al., "Cell proloferation kinetics of normal and tumor tissue in vitro: quiescent reproductive cells and the cycling reproductive fraction," <i>Cell Prolif.</i> , 28:1-15, 1995.
	C5	Barker et al., "GABA actions on the excitability of cultured CNS neurons ,," <i>Neurosci. Lett.</i> , 47:313-318, 1984.
	C6	Bar-Sagi et al., "Negative modulation of sodium channels in cultured chick muscle cells by the channel activator batrachotoxin," <i>J. Biol. Chem.</i> , 260:4740-4744, 1985.
	C7	Baulac et al., "A second locus for familial generalized epilepsy with febrile seizures plus maps to chromosome 2q21-q33," <i>Am. J. Hum. Genet.</i> , 65:1078-1085, 1999.
	C8	Baunoch et al., "R-ELISA: repeated use of antigen-coated plates for ELISA and its application for testing of antibodies to HIV and other pathogens," <i>Biotechniques</i> , 12:412-417, 1992.
	C9	Berkovic et al., "Epilepsies in twins: genetics of the major epilepsy syndromes," <i>Ann. Neurol.</i> , 43:435-445, 1998.
	C10	Biervert et al., "A potassium channel mutation in neonatal human epilepsy," <i>Science</i> , 279:403-406, 1998.

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UnknownU.S. Patent Documents  
*See Page 1*Foreign Patent Documents  
*See Page 1*Other Art  
*See Page 1***Other Art (Including Author, Title, Date Pertinent Pages, Etc.)**

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	C11	Bu et al., "The exon-intron organization of the genes (GAD1 and GAD2) encoding two human glutamate decarboxylases (GAD67 and GAD65) suggests that they derive from a common ancestral GAD," <i>Genomics</i> , 21:222-228, 1994.
	C12	Cardell et al., Agnew. Chem. Int. Ed. Engl., 33:2061-2063, 1994.
	C13	Charlier et al., "A pore mutation in a novel KQT-like potassium channel gene in an idiopathic epilepsy family," <i>Nat. Genet.</i> , 18:53-55, 1998.
	C14	Cheviron et al., "The antiproliferative activity of the tetrapeptide Acetyl-N-SerAspLysPro, an inhibitor of haematopoietic stem cell proliferation, is not mediated by a thymosin beta 4-like effect on actin assembly," <i>Cell Prolif.</i> , 29:437-446, 1996.
	C15	Chia et al., "Cytoskeletal association of an esterase in Dictyostelium discoideum," <i>Exp. Cell Res.</i> , 244:340-348, 1998.
	C16	Cho et al., "An Unnatural Biopolymer," <i>Science</i> , 261:1303-1305, 1993.
	C17	Clare et al., "Voltage-gated sodium channels as therapeutic targets," <i>Drug Discovery Today</i> , 5:506-520, 2000.
	C18	Corey et al., "The occurrence of epilepsy and febrile seizures in Virginian and Norwegian twins," <i>Neurology</i> , 41:1433-1436, 1991.
	C19	Cull et al., "Screening for receptor ligands using large libraries of peptides linked to the C terminus of the lac repressor," <i>Proc. Natl. Acad. Sci. USA</i> , 89:1865-1869, 1992.
	C20	Denyer et al., "HTS approaches to voltage-gated ion channel drug discovery," <i>Drug Discovery Today</i> , 3:323-332, 1998.
	C21	DeWitt et al., ""Diversomers": an approach to nonpeptide, nonoligomeric chemical diversity," <i>Proc. Natl. Acad. Sci. USA</i> , 90:6909-6913, 1993.
	C22	Elliot et al., "Bin1 functionally interacts with Myc and inhibits cell proliferation via multiple mechanisms," <i>Oncogene</i> , 18:3564-3573, 1999.
	C23	Elmslie et al., "Genetic mapping of a major susceptibility locus for juvenile myoclonic epilepsy on chromosome 15q," <i>Hum. Mol. Genet.</i> , 6:1329-1334, 1997.
	C24	Engel et al., Epilepsy: A Comprehensive Textbook, Lippincott-Raven, Philadelphia, 1-7 (1), 1997.

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Atty. Docket No.

GOUD:023USD2

Serial No.

10/664,423

Applicant

Guy A. Rouleau *et al.*

Filing Date:

September 17, 2003

Group:

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## Other Art

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	C25	Erb et al., "Recursive deconvolution of combinatorial chemical libraries," <i>Proc. Natl. Acad. Sci. USA</i> , 91:11422-11426, 1994.
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	C27	Fodor et al., "Multiplexed biochemical assays with biological chips," <i>Nature</i> , 364:555-556, 1993.
	C28	Gallop et al., "Applications of combinatorial technologies to drug discovery. 1. Background and peptide combinatorial libraries," <i>J. Med. Chem.</i> , 37:1233-1251, 1994.
	C29	Gonzalez et al., "Cell-based assays and instrumentation for screening ion-channel targets," <i>Drug Discovery Today</i> , 4:431-439, 1999.
	C30	Gonzalez et al., "Modification of tau to an Alzheimer's type protein interferes with its interaction with microtubules," <i>Cell. Mol. Biol.</i> , 44:1117-1127, 1998.
	C31	Greenberg et al., "Juvenile myoclonic epilepsy (JME) may be linked to the BF and HLA loci on human chromosome 6," <i>Am. J. Med. Genet.</i> , 31:185-192, 1988.
	C32	Guipponi et al., "Linkage mapping of benign familial infantile convulsions (BFIC) to chromosome 19q," <i>Hum. Mol. Genet.</i> , 6:473-477, 1997.
	C33	Gyapay et al., "The 1993-94 Genethon human genetic linkage map," <i>Nat Genet.</i> 7:246-339, 1994.
	C34	Hamill et al., "Improved patch-clamp techniques for high-resolution current recording from cells and cell-free membrane patches," <i>Pflügers Archiv.</i> , 391:85-100, 1981.
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	C36	Kawai et al., "Death-associated protein kinase 2 is a new calcium/calmodulin-dependent protein kinase that signals apoptosis through its catalytic activity," <i>Oncogene</i> , 18:3471-3480, 1999.
	C37	Komada et al., "Hrs, a FYVE finger protein localized to early endosomes, is implicated in vesicular traffic and required for ventral folding morphogenesis," <i>Genes &amp; Dev.</i> , 13:1475-1485, 1999.
	C38	Lam et al., "A new type of synthetic peptide library for identifying ligand-binding activity," <i>Nature</i> , 354:82-84, 1991.

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Form PTO-1449 (modified)

## List of Patents and Publications for Applicant's

## INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

Atty. Docket No. GOUD:023USD2	Serial No. 10/664,423
<b>Applicant</b> Guy A. Rouleau <i>et al.</i>	
Filing Date: September 17, 2003	Group: Unknown

U.S. Patent Documents <i>See Page 1</i>	Foreign Patent Documents <i>See Page 1</i>	Other Art <i>See Page 1</i>
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	C39	Lam, K.S., "Application of combinatorial library methods in cancer research and drug discovery," <i>Anti-Cancer Drug Design</i> , 12:145-167, 1997.
	C40	Lanthrop et al., "Easy calculations of lod scores and genetic risks on small computers," <i>Am. J. Genet.</i> , 36:460-465, 1984.
	C41	Lennox et al., Epilepsy and related disorders, Little Brown, pp. 532-574, 1960.
	C42	Leppert et al., "Benign familial neonatal convulsions linked to genetic markers on chromosome 20," <i>Nature</i> , 337:647-648, 1989.
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	C45	Malo et al., "Localization of a putative human brain sodium channel gene (SCN1A) to chromosome band 2q24," <i>Cytogenet. Cell Genet.</i> , 67:178-186, 1994.
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	C47	McConnell et al., "The cytosensor microphysiometer: biological applications of silicon technology," <i>Science</i> , 257:1906-1912, 1992.
	C48	McPhee et al., "A critical role for the S4-S5 intracellular loop in domain IV of the sodium channel alpha-subunit in fast inactivation," <i>J. Biol. Chem.</i> , 273:1121-1129, 1998.
	C49	Miyaji-Yamaguchi et al., "Coiled-coil structure-mediated dimerization of template activating factor-I is critical for its chromatin remodeling activity," <i>Journal of Mol. Biol.</i> , 290:547-557, 1999.
	C50	Morvan et al., "alpha-DNA. I. Synthesis, characterization by high field 1H-NMR, and base-pairing properties of the unnatural hexadeoxyribonucleotide alpha-[d(CpCpTpTpCpC)] with its complement beta-[d(GpGpApApGpG)]," <i>Nucleic Acids Research</i> , 14:5019-5035, 1986.
	C51	Moulard et al., "Identification of a new locus for generalized epilepsy with febrile seizures plus (GEFS+) on chromosome 2q24-q33," <i>Am. J. Hum. Genet.</i> , 65:1396-1400, 1999.

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	C54	Nielsen, P.E., "Applications of peptide nucleic acids," <i>Curr. Opin. Biotechnol.</i> , 10:71-75, 1999.
	C55	Okuwaki et al., "Template activating factor-I remodels the chromatin structure and stimulates transcription from the chromatin template," <i>J. Biol. Chem.</i> , 273:34511-34518, 1998.
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	C59	Plummer and Meisler, "Evolution and diversity of mammalian sodium channel genes," <i>Genomics</i> , 57:323-331, 1999.
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	C61	Schroeder et al., "Moderate loss of function of cyclic-AMP-modulated KCNQ2/KCNQ3 K <sup>+</sup> channels causes epilepsy," <i>Nature</i> , 396:687-690, 1998.
	C62	Scott et al., "Searching for peptide ligands with an epitope library," <i>Science</i> , 249:386-390, 1990.
	C63	Sillampää et al., "Genetic factors in epileptic seizures: evidence from a large twin population," <i>Acta Neurol. Scand.</i> , 84:523, 1991.
	C64	Singh et al., "A novel potassium channel gene, KCNQ2, is mutated in an inherited epilepsy of newborns," <i>Nat. Genet.</i> , 18:25-29, 1998.
	C65	Sjolander et al., "Integrated fluid handling system for biomolecular interaction analysis," <i>Anal. Chem.</i> , 63:2338-2345, 1991.

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## Other Art

*See Page 1***Other Art (Including Author, Title, Date Pertinent Pages, Etc.)**

Exam. Init.	Ref. Des.	Citation
	C66	Steinlein et al., "A missense mutation in the neuronal nicotinic acetylcholine receptor alpha 4 subunit is associated with autosomal dominant nocturnal frontal lobe epilepsy," <i>Nat. Genet.</i> , 11:201-203, 1995.
	C67	Szabo et al., "Surface plasmon resonance and its use in biomolecular interaction analysis (BIA)," <i>Curr. Opinion, Struct. Biol.</i> , 5:699-705, 1995.
	C68	Tamaskovic et al., "Enzyme-linked immunosorbent assay for the measurement of JNK activity in cell extracts," <i>Biological Chemistry</i> , 380:569-578, 1999.
	C69	Taylor et al., "Enzyme-linked immunosorbent assay for the measurement of JNK activity in cell extracts," <i>Adv. Pharmacol.</i> , 39:47-98, 1997.
	C70	Wallace et al., "Febrile seizures and generalized epilepsy associated with a mutation in the Na <sup>+</sup> -channel beta1 subunit gene SCN1B," <i>Nature Genet.</i> , 19:366-370, 1998.
	C71	Zuchermann et al., "Discovery of nanomolar ligands for 7-transmembrane G-protein-coupled receptors from a diverse N-(substituted)glycine peptoid library," <i>J. Med. Chem.</i> , 37:2678-2685, 1994.
	C72	Commission on classification and terminology of the international league against epilepsy, <i>Epilepsia</i> , 30:389-399, 1989.

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